

of anything is our idea of its sensible effects. . . ." That is, if words are to have any meaning, one must be able to use the operational formula, which says "if A then B," which is to say that such an object or such qualities imply that such effects can be expected. If a word refers to an object or a quality about which no practical effects can be conceived, such a word has no meaning.

Peirce was, of course, highly influenced by the language of science, for it is particularly scientific language that satisfies this pragmatic test for meaning. What he was arguing against was the kind of rationalism Descartes had firmly fixed in the theories of knowledge. To be sure, the earlier empiricists had sought to show the shortcomings of rationalism, but Peirce found the assumptions of rationalism still very much alive. Descartes had localized all thought within the mind of each individual. Intellectual certainty for him consisted in "clear and distinct" ideas, which the mind grasped by intuition. For Descartes, the mind was a purely theoretical instrument that could operate successfully in isolation from environmental circumstances. Thinking, for him, was chiefly a matter of self-consciousness. Against all these assumptions Peirce argued that thinking always occurs in a context, not in isolation from it. Meanings are derived not by intuition but by experience or experiment. For these reasons, meanings are not individual or private but social and public. Again, if there is no way of testing ideas by their effects or public consequences, such ideas are meaningless. To be able to distinguish between meaningful and meaningless is particularly important, Peirce thought, when various and opposing systems of thought are urged upon a person.

The Role of Belief Peirce looked upon belief as occupying the very important middle position between thought and action. Beliefs guide our desires and shape our actions. But beliefs are "unfixed" by doubts. It is when the "irritation of doubt" causes a struggle to attain belief that the enterprise of thought begins. Through thought, we try to fix our beliefs so that we shall have a guide for action. There are several ways in which we can fix our beliefs, according to Peirce. There is the method of *tenacity*, whereby people cling to beliefs, refusing to entertain doubts about them or to consider arguments or evidence for another view. Another method is to invoke *authority*, as when persons in authority require the acceptance of certain ideas as true on pain of punishment. Still another method is that of the metaphysician or philosopher such as Plato, Descartes, or Hegel, who, according to Peirce, would settle questions of belief by asking whether an idea was "agreeable to *reason*." With all these methods Peirce found himself in disagreement precisely because they could not, in his view, achieve their intent, namely, to fix or settle belief. What they all lacked was some connection with experience and behavior.

Peirce therefore offered a fourth method, the method of *science*, whose chief virtue, he thought, was its realistic basis in experience. Unlike the methods of *tenacity*, *authority*, and *reason*, all of which rest upon what a person possesses within his own mind as a consequence solely of his thinking, the method of science is built on the assumption that there are real things, the characteristics of

which are entirely independent of our opinions about them. Moreover, because these real things affect our senses according to regular laws, we can assume that they will affect each observer the same way. Beliefs that are grounded in such real things can therefore be verified, and their "fixation" can be a public act rather than a private one. There is in fact no way to agree or disagree with a conclusion arrived at by means of the first three methods since they refer to nothing whose consequences or real existences can be tested. The method of tenacity is clearly irrational; the method of authority precludes argument; and the method of *a priori* reasoning, because it occurs in isolation from facts, permits the affirmation of several different explanations of things, as was the case with the alternative metaphysical systems produced by the Continental rationalists.

The Elements of Method What commended the scientific method to Peirce for settling the conflicts between alternative beliefs were those elements of this method that would overcome and avoid individual prejudice. For one thing, the method of science requires that a person state not only what truth he believes but also how he arrived at it. The procedures he follows should be available to anyone who cares to retrace the same steps to test whether the same results will occur. Peirce again and again emphasized this public or community character of the method of science. Secondly, the method of science is highly self-critical. It subjects its conclusions to severe tests, and wherever indicated, the conclusions of a theory are adjusted to fit the new evidence and new insights. This, says Peirce, ought also to be the mental attitude of anyone in relation to his beliefs. Thirdly, Peirce felt that science requires that there be a high degree of cooperation between all members of the scientific community. This element of the method, this cooperation, is yet another force that prevents any individual or group from shaping truth to fit its own interests. Conclusions of science must be conclusions that all scientists can draw. Similarly, in questions of belief and truth, it should be possible for anyone to grasp the same conclusions. Here Peirce laid down the method of empirical inquiry as the basis for any cooperative approach to belief. This meant that in the last analysis, there would have to be some practical consequence, that is, some consequence in practice, of any idea. As he pointed out, "the final upshot of thinking is the exercise of volition." The essence of science, as Peirce understood it, though not the way all scientists understand it, is that science is a method of doing something. For this reason, Peirce considered all thinking a way of doing something. But before men are able to *do*, they must have a *belief*; a belief, in turn, requires *thought*. Peirce had argued that only thought that is tested by the criteria of experience and experiment could provide men with the surest basis for belief, which in turn would establish their habit of action.

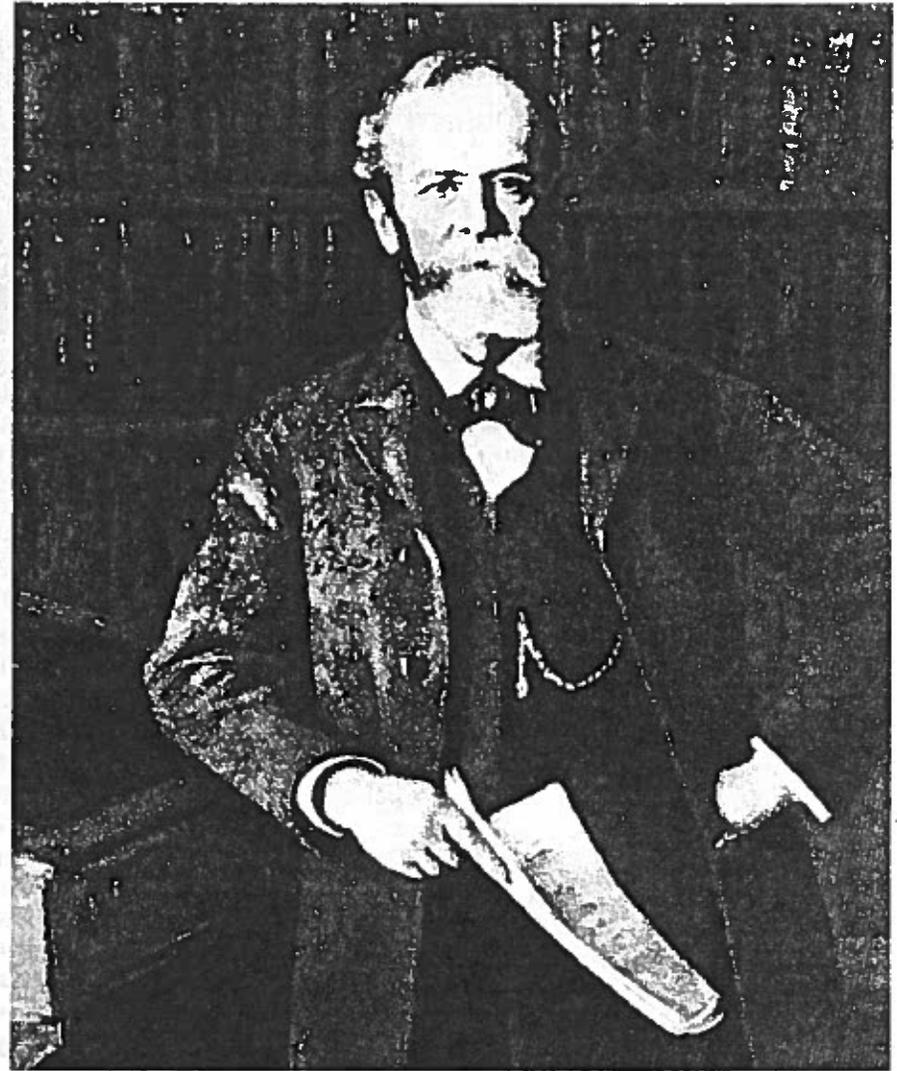
WILLIAM JAMES (1842-1910)

The rich flavor of William James' writings reflects the equally rich quality and breadth of his life. Born in New York City, he grew up in a highly cultured

family, which produced not only the most outstanding American philosopher, but also his brother Henry James, the gifted novelist. William studied at Harvard and traveled to universities throughout Europe acquiring a broad outlook both culturally and intellectually. He received his M.D. degree from the Harvard Medical School in 1869 and was appointed to its faculty in 1872 as an instructor in physiology. From medicine, William James moved to psychology and philosophy, producing in 1890 his famous *Principles of Psychology*. He was a member of the illustrious Harvard department of philosophy, which included George Santayana and Josiah Royce. Although he did not write any philosophical treatise comparable in scope to his famous book on psychology, he published a great many definitive essays, which singly and as collections in book form were read throughout the world. By the time of his death in 1910 at the age of sixty-eight, William James had fashioned a new approach to philosophy and had managed to communicate his pragmatic principles to an unusually wide audience of readers. Starting from the work already done by Peirce, he took a fresh look at pragmatism and developed it along novel lines. Among the important topics to which James turned his attention were the questions of (1) the pragmatic method, (2) the pragmatic theory of truth, (3) the role and status of the human will, and (4) the relevance of the will to believe.

Pragmatism as a Method William James thought that "the whole function of philosophy ought to be to find out what definite difference it will make to you and me, at definite instants of our life, if this world-formula or that world-formula be the true one." His emphasis was upon the concrete concerns of life, upon facts, upon action as it affects and displays power, and upon power and action as they affect *my* life *now* and in the determinate future. But pragmatism as such contained no substance or content, no special information about human purpose or destiny. As a philosophy, pragmatism did not have its own creed; it did not as such offer a world-formula.

"Pragmatism," said James, "is a method only." Still, as a method, pragmatism assumed that human life has a purpose and that rival theories about man and the world would have to be tested against this purpose. There is in fact no single definition of man's purpose; the understanding of human purpose is part of the activity of thinking. Philosophical thinking arises when men want to understand things and the setting in which they live; purpose derives its meaning from a sense of being at home in the universe. As a method, pragmatism rejected rationalism chiefly because, said James, it was dogmatic and presumed to give conclusive answers about the world in terms that frequently left the issues of life untouched. By contrast, pragmatism "has no dogmas and no doctrines save its method." As a method, pragmatism hovered close to life, refusing to close the process of thought prematurely, taking its cue from the proved facts of life, willing to be led to new conceptions of purpose as deeper facets of human emotion and expectations were discovered. Again, as a method, pragmatism did not specify any *particular* results, though it did orient thinking around results, fruits, and consequences. No formulation either in science, theology, or philoso-



William James (*The Bettmann Archive*)

phy should be taken as final; all formulations of theory are only approximations. In the last analysis, the meanings of all these theories are to be found not in their internal verbal consistency, but in their capacity to solve problems.

Instead of mere consistency, said James, "you must bring out of each word its practical cash value." Although pragmatism stands for no particular results, as a method in practice its essence is precisely to assure *results*. When it finds a theory that does not *make* a difference one way or another for practical life, such a theory is abandoned. If, for example, there is a dispute over whether God exists,

pragmatism has no preconceived creed to offer; but it does ask whether it makes a difference to believe in God's existence. To raise that question could very well lead one to see the "truth" in the claim of God's existence even though the same person might have rejected a "rational proof" of the existence of God. By asking always what difference an idea makes, James had virtually reduced the pragmatic method to the formula "does it work?" But supporting that formula was the combined methodological apparatus, as James said, of "nominalism—in always appealing to particulars; [of] utilitarianism in emphasizing practical aspects; [of] positivism in its disdain for verbal solutions, useless questions and metaphysical abstractions." It was inevitable that such a method should raise the question whether to say about an idea that "it works" is the same as saying that "it is true."

The Pragmatic Theory of Truth James made the startling statement that "truth happens to an idea." What was so startling about this statement was that the more traditional theories of truth took virtually the opposite view, namely, that truth is a property or quality of an idea. James was rejecting what he called the *copy-view* of truth. This theory assumes that an idea "copies" *reality*, and an idea is therefore true if it copies what is "out there" accurately. Truth is that quality an idea has when it copies accurately. The assumption of the "intellectualists" who hold this theory, said James, is that "truth means essentially an inert static relation. When you've got your true idea of anything, there's an end of the matter. You're in possession; you *know*. . . ." Against this theory, James brought the whole arsenal of his pragmatism. Truth must be the cash value of an idea. What other motive could there be for saying that something is true or not true than to provide workable guides to practical behavior? James would ask, "what concrete difference will its being true make in anyone's actual life?"

By tying truth to life, to action, James rejected the view that truth is a *stagnant* property in ideas. Ideas *become* true; they are *made* true by events. That is why he wanted to say that truth *happens* to ideas. In addition, to say that truth happens to ideas is to make truth a part of experience. Whereas the *copy-view* of truth assumes that ideas really do copy what is out there, pragmatism says that there rarely is exact copying. Consider, he says, a clock on the wall. We consider it to be a clock not because we have a *copy-view* of it: we see only its face and hands, but not its internal mechanism, which makes it a clock. Still, our notion of it passes for true, not because our idea of it is an accurate copy, but because we *use* it as a clock and as such it *works*, enabling us to end a lecture "on time" and to catch the train. To be sure, we could check our idea to verify whether it is indeed a clock. But *verifiability* is as good as verification. We do not in fact verify every idea. Indeed, says James, "for one truth-process completed there are a million in our lives that function in this state of nascency." For this reason truth lives "on a credit system." We do not require in every instance of truth that we should, as it were, see the wheels of the clock. What more would be added to the truth of our idea that that is a clock than we already have in the successful regulation of our behavior?

Ideas become true insofar as they help us to make successful connections between various parts of our experience. Truth is therefore part of the process of experience, of *living*. As part of a process, truth is *made* by the process of successful experience; successful experience is the verification process. To say that a truth always is, that it absolutely obtains, would mean that the clock on the wall is a clock whether anyone sees it or not. But what James wants to show is that the question about the "truth" of the clock arises only in actual life when we live "as if" that thing on the wall is a clock, and the truth that it is a clock is *made* by our successful behavior. On this theory, says James, there are many, *plural* truths, as many truths as there are concrete successful actions. Moreover, James would say that truth is bound up with the personal interests of concrete individuals. By this he meant that truth is not something *capricious*. As bound up with personal interests, the "truth" must lead to successful action; it must *work*. In the long run a true belief must work beneficially, just as an "untrue" one will work destructively.

If the pragmatist is asked why anyone *ought* to seek the truth, James answers that "our obligation to seek the truth is part of our general obligation to do what pays," just as one ought to seek health because it pays to be healthy. Above all, James thought that the pragmatic theory of truth could render a desperately needed service to philosophy by providing a means for settling disputes. Some disputes cannot be resolved if each party simply affirms that his views are true. James would ask, which theory fits the facts of real life? One such dispute, which has exercised philosophers through the ages, is the question of freedom versus determinism.

The Role and Status of the Will William James was convinced that it is not possible to "prove" by any rational mode of argument that the will of man is either free or determined. Apparently equally good arguments could be given for each case. But he was nevertheless convinced that he could put the problem in a new light by applying the pragmatic method, by asking what difference it makes in actual life to accept one or the other side of the dispute. And the dispute was worth undertaking because it implied something momentous about life—either men were driven by external forces or they possessed "freedom" to choose their mode of behavior and therefore possessed the power to shape their lives and, thus, history.

The central issue in this dispute, said James, "relates solely to the existence of possibilities," of things that may, but need not, be. The determinist says that there are no possibilities, that what will be will be: ". . . those parts of the universe already laid down absolutely appoint and decree what the other parts shall be. The future has no ambiguous possibilities in its womb. . . ." On the other hand, the indeterminist says that there is a certain amount of "loose play" in the universe, so that the present existence of certain facts and arrangements does not necessarily determine what the future shall be; he says that there are genuine alternatives in the future from which an actual choice can be made. Here then are two contradictory points of view. What divides us into *possibility* men and

antipossibility men, asks James. It is, he says, the postulates of rationality. For some men it seems more rational to say that all events are set down from eternity, whereas for others it seems more rational to assume that men can engage in genuine choice. If both of these points of view seem equally rational to their respective proponents, how can the dispute be resolved?

This was not for James simply an interesting puzzle. His whole philosophical orientation revolved around this problem of the role and status of the will. With his basic concern about action and choosing those ideas and modes of behavior with the highest cash value, he inevitably saw philosophy in terms of human striving, and this, he was convinced, implied a certain kind of universe. His solution of the problem, therefore, was to ask the simply pragmatic question, what does a deterministic world imply? If, that is, one says that all events without exception are rigorously determined from the beginning of time so that they could not have happened in any other way, what kind of universe must this be? Using a metaphor, one could only answer that such a universe is like a machine, where each part fits tightly and all the gears are interlocked, so that the slightest motion of one part causes a motion of every other part. There is no loose play in the machine. How can such a metaphor be applied to men, James asks. A man is different from a mechanical part in a machine. What makes a man different is his consciousness. For one thing, a man is capable of a "judgment of regret." But how can one "regret" what could not have been otherwise? The determinist must define the world as a place where what "ought to be" is impossible. Still, we are always making not only judgments of regret, but of approval and disapproval. Moreover, we seek to persuade others to do or refrain from doing certain actions. In addition, men are punished or rewarded for certain actions. All these forms of judgment imply that a man is constantly facing genuine choices; a "forced" or "determined" act is not a *choice*.

The capacity of choice involves the capacity to recognize alternative influences upon one, to hold these alternatives in momentary suspense and then select one or the other. If one denies such a capacity for choice, the only alternative is the mechanical explanation. But no human beings ever consciously act as if this were a mechanically determined universe. Most of our language and thought processes suggest just the opposite; they suggest that at many points each person in fact faces genuine possibilities, options, real choices. James did not want to deny the reality of causal relations. Indeed, his pragmatism rested upon the operational formula that "if we do A, B will happen." But the word *if* is the clue; we are not forced to do A, and therefore B will happen only if we decide to choose A. James realized that if the determinist charged that his ideas about free will were determined, that his assumptions about genuine possibilities were part of the block universe, that such charges would indeed bring an end to rational discourse, that the problem could no longer be discussed. What would remain, however, would be human beings with their hopes, fears, and regrets, and in the arena of daily life the assumptions of mechanical determinism would be abandoned, and the pragmatic question would come to the forefront, the question "what should I do?" or "which alternative would be better or wiser for me?"

In actual practical life, we see ourselves and others as vulnerable. Men are capable of lying, stealing, and murdering. We judge these to be wrong, not only in retrospect, but wrong because they were not rigorously inevitable when they were done; persons doing these things "could have" done otherwise. James concludes, in this vein, by saying that this problem is finally a "personal" one, that he simply cannot conceive of the universe as a place where murder *must* happen; it is a place where murder *can* happen and *ought not*. If this reflects only his "instinct" concerning the kind of universe this is, then, says James, "there are *some* instinctive reactions which I, for one, will not tamper with." As men, we remain the same whatever side of the dispute we choose. But, said James, the only consistent way to represent what in fact men do when they help, hinder, injure, hope, judge, and regret is to see the universe as one with real possibilities, where individual effort can make a difference in life and history. This was the basic theme in his classic essay on *The Will to Believe*.

The Relevance of the Will to Believe James raised this question: "Can our will either help or hinder our intellect in its perceptions of truth?" In answering this question, James did not intend to propose the fanciful thesis that "wishing will make it true." His intention was to give a defense of "our right" to believe something of which our purely logical intellect may not have been persuaded. Religious questions in particular have a way of running ahead of evidence. But if the evidence for God's existence is lacking, there is, nevertheless, the fact of human behavior. James put great store by the concrete fact that men engage in moral discourse and also religious practice. It is necessary to recognize this fact of religious behavior when considering the issue of religious truth. Moreover, pragmatism recognized the close relation between thinking and doing and therefore between belief and action. This made belief an important element in life, and what James wanted to do was to discover just how relevant the will to believe is in relation to truth.

James said that the will to believe is relevant only under highly restricted conditions. One cannot will to believe just anything under any and all circumstances. First of all, there must be a clear *hypothesis* that is proposed for our belief. Such an hypothesis must be *live* rather than *dead*; that is, it must, as an electric wire, make a connection with my life. If an American Protestant is asked to believe in the Mahdi, this makes no connection with him and arouses no credibility at all and could, therefore, be only a dead hypothesis. Further, there must be an *option*. James argued that a genuine option requires that both alternative hypotheses be *live* and not *dead*; the option must be *forced* and not avoidable; and it must be *momentous* and not trivial. The will to believe, then, is relevant and can operate only when we are confronted with an option that (1) is *forced* upon us, in that it is impossible not to choose one way or the other, (2) is a *living* option because both hypotheses make a genuine appeal, and (3) is a *momentous* option because the opportunity to choose might not present itself again. And, moreover, belief is relevant only where reason alone cannot settle the matter.

Having stated these conditions, James then argues that it is frequently the case that our wills influence our convictions. The clearest example, he thought, was our postulate that there is truth and that our minds can attain it. How do we know there is truth? We don't, says James; our belief that there is truth is but a "passionate affirmation of desire." We want to have truth, and we want to believe that our experiments will unfold more truth, and in this desire we have the support of the community. For these reasons, James says that "our passionate nature not only lawfully may, but must, decide an option between propositions, whenever it is a genuine option that cannot by its nature be decided on intellectual grounds; for to say, under such circumstances, 'Do not decide, but leave the question open,' is itself a passionate decision . . . and is attended with the . . . risk of losing the truth."

Just how the will to believe becomes relevant, what its function really is, is suggested by the last phrase, where James speaks of the "risk of losing the truth." James argues that certain kinds of truths become possible only when we put ourselves in the position for the truth fully to materialize itself. If we fail to make ourselves "available," we risk losing the truth. Suppose a young man wants to know whether a certain young lady loves him. Let us also suppose that objectively it is a fact that she loves him but he does not *know* it. If he assumes that she does not, if, that is, he does not will to believe that she loves him, his doubt will prevent him from saying or doing what would cause her to reveal her love. In this case, he would "lose the truth." His will to believe would not necessarily create the love; that is already there. Belief has the effect of making what is already there come full circle. If the young man required evidence before he could know the truth, he would never know it, because the evidence he is looking for can become available only after he willed to believe it is true. In this case, the will to believe would have discovered a fact that already existed. Projecting this method deeper into the realm of religious experience, James did not want to argue that the will to believe would "create" the existence of God as the product of mere wish. He rather thought that the truth of religion and the power of God in human experience is the discovery, through the will to believe, of what is in fact "there." Some truths forever escape us until we plunge into the stream of experience.

Besides *discovering* facts, the will to believe can *create* facts. An individual, says James, frequently gains a promotion chiefly because he believed he could achieve it and acted resolutely on that belief. Taking his estimate of his powers as true, such a person *lives* by it, sacrifices for its sake, and takes risks. His faith *creates* its own verification. In a political campaign, the will to believe can provide the psychic energy for creating a majority for a candidate. When one person is impressed by the optimism of another, he is energized to express the same optimism about the outcome of the election, and this *energy* can eventually create the majority vote. James gives the illustration of the passengers on a train, all of whom are individually brave, but when held up by robbers each one is afraid that if he resists he will be shot. If they believed that the others would arise, resistance could begin. The robbers know that they can count on each

other. The passengers, on the other hand, are paralyzed. Though they possess superior force, they are not *sure* their fellows would support their resistance. But if one passenger actually arose, that evidence could influence the others, and this will to believe would help to create the fact of total resistance.

In the end, religious experience was for James a fact that is both discovered and created through the will to believe. His pragmatism led him to distinguish between organized religion and that firsthand religion whose cash value could be realized only when a person put himself into a position to be affected by it. Religion grows out of the deep personal experience of the fragmentary or broken character of life, and this awareness leads one to discover a power that can overcome this sense of incompleteness. James thought of God in these terms, as a power able to reconstruct human life. For this reason, James concluded that "the universe is no longer a mere *It* to us, but a *Thou*, if we are religious; any relation that may be possible from person to person might be possible here."

JOHN DEWEY (1859-1952)

If William James was the most brilliant of the pragmatists, John Dewey was in the final analysis the most influential. By the time of his death at the age of ninety-two, Dewey had brought about a reconstruction of philosophy and had influenced the workings of many American institutions, particularly the schools and the legislative and judicial processes. His influence was felt beyond the boundaries of the United States, especially in Japan and China, where his lectures made a lasting impression. Born in Burlington, Vermont, John Dewey was educated at the University of Vermont and at the Johns Hopkins University, where he received his Ph.D. in philosophy in 1884. For the next ten years, except for one year when he was at Minnesota, he taught at the University of Michigan, and for the next decade at the University of Chicago, where he gained renown for his pragmatic concepts of education. As director of the Laboratory School for children at the University of Chicago, he experimented with a more permissive and creative atmosphere for learning, setting aside the more traditional and formal method of learning by listening and encouraging instead the pupil's initiative and individual involvement in projects. From 1904 to 1929 he was a member of the faculty at Columbia University. He produced an enormous number of writings even after his retirement in 1929. His interests covered a wide range, and he wrote on logic, metaphysics, and the theory of knowledge. But as Dewey's chief expressions of pragmatism were in the social rather than individual realm, his most influential works related to education, democracy, ethics, religion, and art.

The Spectator versus Experience Dewey's chief quarrel with earlier philosophy was that it had confused the true nature and function of knowledge. For the most part, he said, the empiricists had assumed that thinking refers to fixed things in nature, that for each idea there is a corresponding something in reality. It is as though knowing is modeled after what is supposed to happen when we look at